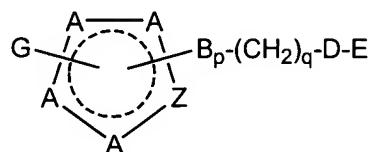


**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1. (Original) A compound having the formula:



or a pharmaceutically acceptable salt, ester, or prodrug thereof,  
wherein

A, at each occurrence, independently is carbon, carbonyl, or nitrogen, provided at least one A is carbon;

Z is carbon, nitrogen, oxygen, or sulfur;

B is selected from the group consisting of O, NR<sup>2</sup>, S(O)<sub>r</sub>, C=O, C=S, and C=NOR<sup>3</sup>,

p is 0 or 1;

q, at each occurrence, independently is 0 or 1;

r is 0, 1, or 2;

R<sup>2</sup>, at each occurrence, independently is selected from the group consisting of:

a) hydrogen, b) S(O)<sub>r</sub>R<sup>4</sup>, c) formyl, d) C<sub>1-8</sub> alkyl, e) C<sub>2-8</sub> alkenyl, f) C<sub>2-8</sub> alkynyl, g) C<sub>1-8</sub> alkoxy, h) C<sub>1-8</sub> alkylthio, i) C<sub>1-8</sub> acyl, j) saturated, unsaturated, or aromatic C<sub>3-8</sub> carbocycle, and k) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of d) – k) optionally is substituted with one or more moieties selected from the group consisting of carbonyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, F, Cl, Br, I, CN, NO<sub>2</sub>, -NR<sup>3</sup>R<sup>3</sup>, -OR<sup>3</sup>, -S(O)<sub>r</sub>R<sup>4</sup>, -S(O)<sub>r</sub>NR<sup>3</sup>R<sup>3</sup>, -C(O)R<sup>3</sup>, -C(O)OR<sup>3</sup>, -OC(O)R<sup>3</sup>, -C(O)NR<sup>3</sup>R<sup>3</sup>, and -OC(O)NR<sup>3</sup>R<sup>3</sup>;

alternatively, two R<sup>2</sup> groups, taken together with the atom to which they are bonded, form i) 5-8 membered saturated or unsaturated carbocycle, or ii) 5-8 membered saturated or unsaturated heterocycle containing one or more atoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein i) – ii) optionally is substituted with one or more moieties selected from the group consisting of carbonyl, F, Cl, Br, I, CN, NO<sub>2</sub>, -NR<sup>3</sup>R<sup>3</sup>, -OR<sup>3</sup>, -S(O)R<sup>4</sup>, -S(O)NR<sup>3</sup>R<sup>3</sup>, -C(O)R<sup>3</sup>, -C(O)OR<sup>3</sup>, -OC(O)R<sup>3</sup>, -C(O)NR<sup>3</sup>R<sup>3</sup>, -OC(O)NR<sup>3</sup>R<sup>3</sup>, C<sub>1-6</sub> acyl, aryl, substituted aryl, heteroaryl, and substituted heteroaryl; R<sup>3</sup>, at each occurrence, independently is selected from the group consisting of:

a) hydrogen, b) C<sub>1-8</sub> alkyl, c) C<sub>2-8</sub> alkenyl, d) C<sub>2-8</sub> alkynyl, e) C<sub>1-8</sub> acyl, f) saturated, unsaturated, or aromatic C<sub>3-8</sub> carbocycle, and g) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of b) – h) optionally is substituted with one or more moieties selected from the group consisting of carbonyl, F, Cl, Br, I, CN, NO<sub>2</sub>, -NR<sup>6</sup>R<sup>6</sup>, -OR<sup>6</sup>, -S(O)R<sup>6</sup>, -S(O)NR<sup>6</sup>R<sup>6</sup>, -C(O)R<sup>6</sup>, -C(O)OR<sup>6</sup>, -OC(O)R<sup>6</sup>, -C(O)NR<sup>6</sup>R<sup>6</sup>, -OC(O)NR<sup>6</sup>R<sup>6</sup>, C<sub>1-6</sub> acyl, aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

alternatively, two R<sup>3</sup> groups, taken together with the atom to which they are bonded, form i) a 5-7 membered saturated or unsaturated carbocycle, or ii) a 5-7 membered saturated or unsaturated heterocycle containing one or more atoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein i) - ii) optionally is substituted with one or more moieties selected from the group consisting of carbonyl, F, Cl, Br, I, CN, NO<sub>2</sub>, -NR<sup>6</sup>R<sup>6</sup>, -OR<sup>6</sup>, -S(O)R<sup>6</sup>, -S(O)NR<sup>6</sup>R<sup>6</sup>, -C(O)R<sup>6</sup>, -C(O)OR<sup>6</sup>, -OC(O)R<sup>6</sup>, -C(O)NR<sup>6</sup>R<sup>6</sup>, -OC(O)NR<sup>6</sup>R<sup>6</sup>, C<sub>1-6</sub> acyl, aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

R<sup>4</sup> is selected from the group consisting of:

a) hydrogen, b) -NR<sup>3</sup>R<sup>3</sup>, c) -NR<sup>3</sup>OR<sup>3</sup>, d) -NR<sup>3</sup>NR<sup>3</sup>R<sup>3</sup> e) -NHC(O)R<sup>3</sup>, f) -C(O)NR<sup>3</sup>R<sup>3</sup>, g) -N<sub>3</sub>, h) C<sub>1-8</sub> alkyl, i) C<sub>2-8</sub> alkenyl, j) C<sub>2-8</sub> alkynyl, k) saturated,

unsaturated, or aromatic C<sub>3-8</sub> carbocycle, and l) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of h) – l) optionally is substituted with one or more moieties selected from the group consisting of carbonyl, F, Cl, Br, I, CN, NO<sub>2</sub>, -NR<sup>3</sup>R<sup>3</sup>, -OR<sup>3</sup>, -SR<sup>3</sup>, -S(O)R<sup>5</sup>, -S(O)NR<sup>3</sup>R<sup>3</sup>, -C(O)R<sup>3</sup>, -C(O)OR<sup>3</sup>, -OC(O)R<sup>3</sup>, -C(O)NR<sup>3</sup>R<sup>3</sup>, -OC(O)NR<sup>3</sup>R<sup>3</sup>, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkenyl, C<sub>1-6</sub> alkynyl, C<sub>1-6</sub> acyl, aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

R<sup>5</sup> is selected from the group consisting of:

a) hydrogen, b) -NR<sup>3</sup>R<sup>3</sup>, c) -NR<sup>3</sup>OR<sup>3</sup>, d) -NR<sup>3</sup>NR<sup>3</sup>R<sup>3</sup> e) -NHC(O)R<sup>3</sup>, f) -C(O)NR<sup>3</sup>R<sup>3</sup>, g) -N<sub>3</sub>, h) C<sub>1-8</sub> alkyl, i) C<sub>2-8</sub> alkenyl, j) C<sub>2-8</sub> alkynyl, k) saturated, unsaturated, or aromatic C<sub>3-8</sub> carbocycle, and l) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of h) – l) optionally is substituted with one or more moieties selected from the group consisting of F, Cl, Br, I, CN, NO<sub>2</sub>, -NR<sup>3</sup>R<sup>3</sup>, -OR<sup>3</sup>, -SR<sup>3</sup>, -C(O)R<sup>3</sup>, -C(O)OR<sup>3</sup>, -OC(O)R<sup>3</sup>, -C(O)NR<sup>3</sup>R<sup>3</sup>, -OC(O)NR<sup>3</sup>R<sup>3</sup>, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkenyl, C<sub>1-6</sub> alkynyl, C<sub>1-6</sub> acyl, aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

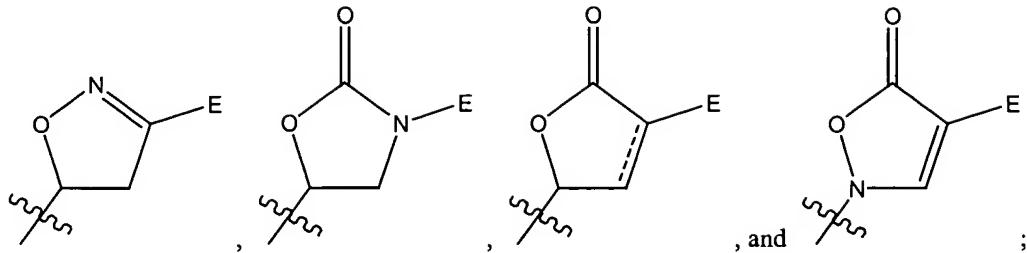
R<sup>6</sup>, at each occurrence, independently is selected from the group consisting of:

hydrogen, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkenyl, C<sub>1-6</sub> alkynyl, C<sub>1-6</sub> acyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

alternatively, two R<sup>6</sup> groups taken together are -(CH<sub>2</sub>)<sub>s</sub>-,

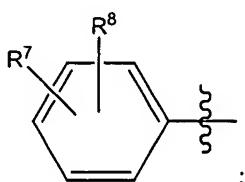
wherein s is 1, 2, 3, 4, or 5;

D-E is selected from the group consisting of:

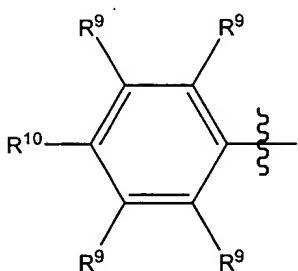


E is selected from the group consisting of:

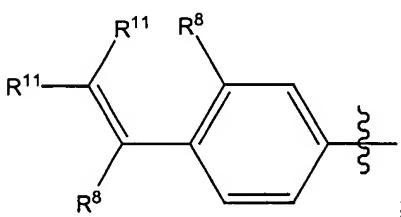
a)



b)



c)



d) 5-10 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more R<sup>13</sup> groups;

e) C<sub>5-10</sub> saturated, unsaturated, or aromatic carbocycle, optionally substituted with one or more R<sup>13</sup> groups;

f) C<sub>1-8</sub> alkyl,

g) C<sub>2-8</sub> alkenyl,

h) C<sub>3-8</sub> alkynyl,

- i)  $C_{1-8}$  alkoxy,
- j)  $C_{1-8}$  alkylthio,
- k)  $C_{1-8}$  acyl,
- l)  $S(O)_rR^5$ ; and
- m) hydrogen,

wherein any of f) – k) optionally is substituted with

- i) one or more  $R^{13}$  groups;
- ii) 5-6 membered saturated, unsaturated, or aromatic heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more  $R^{13}$  groups; or
- iii)  $C_{5-10}$  saturated, unsaturated, or aromatic carbocycle, optionally substituted with one or more  $R^{13}$  groups;

$R^7$  is selected from the group consisting of:

- a) hydrogen, b) carbonyl, c) formyl, d) F, e) Cl, f) Br, g) I, h) CN, i)  $NO_2$ , j)  $OR^3$ , k)  $-S(O)_rR^5$ , l)  $-S(O)_iN=R^2$ , m)  $-C(O)R^2$ , n)  $-C(O)OR^3$ , o)  $-OC(O)R^2$ , p)  $-C(O)NR^2R^2$ , q)  $-OC(O)NR^2R^2$ , r)  $-C(=NR^{12})R^2$ , s)  $-C(R^2)(R^2)OR^3$ , t)  $-C(R^2)(R^2)OC(O)R^2$ , u)  $-C(R^2)(OR^3)(CH_2)NR^2R^2$ , v)  $-NR^2R^2$ , w)  $-NR^2OR^3$ , x)  $-N(R^2)C(O)R^2$ , y)  $-N(R^2)C(O)OR^3$ , z)  $-N(R^2)C(O)NR^2R^2$ , aa)  $-N(R^2)S(O)_rR^5$ , bb)  $-C(OR^6)(OR^6)R^2$ , cc)  $-C(R^2)(R^3)NR^2R^2$ , dd)  $-C(R^2)(R^3)NR^2R^{12}$ , ee)  $=NR^{12}$ , ff)  $-C(S)NR^2R^2$ , gg)  $-N(R^2)C(S)R^2$ , hh)  $-OC(S)NR^2R^2$ , ii)  $-N(R^2)C(S)OR^3$ , jj)  $-N(R^2)C(S)NR^2R^2$ , kk)  $-SC(O)R^2$ , ll)  $C_{1-8}$  alkyl, mm)  $C_{2-8}$  alkenyl, nn)  $C_{2-8}$  alkynyl, oo)  $C_{1-8}$  alkoxy, pp)  $C_{1-8}$  alkylthio, qq)  $C_{1-8}$  acyl, rr) saturated, unsaturated, or aromatic  $C_{5-10}$  carbocycle, and ss) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

wherein any of ll) – ss) optionally is substituted with one or more moieties selected from the group consisting of:

carbonyl; formyl; F; Cl; Br; I; CN; NO<sub>2</sub>; OR<sup>3</sup>; -S(O)<sub>r</sub>R<sup>5</sup>; -S(O)<sub>r</sub>N=R<sup>2</sup>, -C(O)R<sup>2</sup>; -C(O)OR<sup>3</sup>; -OC(O)R<sup>2</sup>; -C(O)NR<sup>2</sup>R<sup>2</sup>; -OC(O)NR<sup>2</sup>R<sup>2</sup>; -C(=NR<sup>10</sup>)R<sup>2</sup>; -C(R<sup>2</sup>)(R<sup>2</sup>)OR<sup>3</sup>; -C(R<sup>2</sup>)(R<sup>2</sup>)OC(O)R<sup>2</sup>; -C(R<sup>2</sup>)(OR<sup>3</sup>)(CH<sub>2</sub>)<sub>r</sub>NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>OR<sup>3</sup>; -NR<sup>2</sup>C(O)R<sup>2</sup>; -NR<sup>2</sup>C(O)OR<sup>3</sup>; -NR<sup>2</sup>C(O)NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>S(O)<sub>r</sub>R<sup>5</sup>; -C(OR<sup>6</sup>)(OR<sup>6</sup>)R<sup>2</sup>; -C(R<sup>2</sup>)(R<sup>3</sup>)NR<sup>2</sup>R<sup>2</sup>; -C(R<sup>2</sup>)(R<sup>3</sup>)NR<sup>2</sup>R<sup>12</sup>; =NR<sup>12</sup>; -C(S)NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>C(S)R<sup>2</sup>; -OC(S)NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>C(S)OR<sup>3</sup>; -NR<sup>2</sup>C(S)NR<sup>2</sup>R<sup>2</sup>; -SC(O)R<sup>2</sup>; C<sub>2-5</sub> alkenyl; C<sub>2-5</sub> alkynyl; C<sub>1-8</sub> alkoxy; C<sub>1-8</sub> alkylthio; C<sub>1-8</sub> acyl; saturated, unsaturated, or aromatic C<sub>5-10</sub> carbocycle, optionally substituted with one or more R<sup>8</sup> groups; and saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more R<sup>8</sup> groups;

R<sup>8</sup> is selected from the group consisting of:

hydrogen; F; Cl; Br; I; CN; NO<sub>2</sub>; OR<sup>6</sup>; aryl; substituted aryl; heteroaryl; substituted heteroaryl; and C<sub>1-6</sub> alkyl, optionally substituted with one or more moieties selected from the group consisting of aryl, substituted aryl, heteroaryl, substituted heteroaryl, F, Cl, Br, I, CN, NO<sub>2</sub>, and OR<sup>6</sup>;

alternatively, R<sup>7</sup> and R<sup>8</sup> taken together are -O(CH<sub>2</sub>)<sub>r</sub>O-;

R<sup>9</sup>, at each occurrence, independently is selected from the group consisting of:

hydrogen, F, Cl, Br, I, CN, OR<sup>3</sup>, NO<sub>2</sub>, -NR<sup>2</sup>R<sup>2</sup>, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> acyl, and C<sub>1-6</sub> alkoxy;

R<sup>10</sup> is selected from the group consisting of:

a) saturated, unsaturated, or aromatic C<sub>5-10</sub> carbocycle, b) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, c) -X-C<sub>1-6</sub> alkyl-saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, d) saturated, unsaturated, or aromatic 10-membered

bicyclic ring system optionally containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, e) saturated, unsaturated, or aromatic 13-membered tricyclic ring system optionally containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, and f) R<sup>9</sup>,

wherein

any of a) - e) optionally is substituted with one or more R<sup>13</sup> groups, and X is O or NR<sup>3</sup>;

alternatively, R<sup>10</sup> and one R<sup>9</sup> group, taken together with the atoms to which they are bonded, form a 5-7 membered saturated or unsaturated carbocycle, optionally substituted with one or more R<sup>13</sup> groups; or a 5-7 membered saturated or unsaturated heterocycle containing one or more atoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more R<sup>13</sup> groups;

R<sup>11</sup> at each occurrence, independently is selected from the group consisting of:

hydrogen; an electron-withdrawing group; aryl; substituted aryl; heteroaryl; substituted heteroaryl; and C<sub>1-6</sub> alkyl, optionally substituted with F, Cl, or Br;

alternatively, any R<sup>11</sup> and R<sup>8</sup>, taken together with the atoms to which they are bonded, form a 5-7 membered saturated or unsaturated carbocycle, optionally substituted with one or more R<sup>13</sup> groups; or a 5-7 membered saturated or unsaturated heterocycle containing one or more atoms selected from the group consisting of nitrogen, oxygen, and sulfur, and optionally substituted with one or more R<sup>13</sup> groups;

R<sup>12</sup> is selected from the group consisting of:

-NR<sup>2</sup>R<sup>2</sup>, -OR<sup>3</sup>, -OC(O)R<sup>2</sup>, -OC(O)OR<sup>3</sup>, -NR<sup>2</sup>C(O)R<sup>2</sup>, -NR<sup>2</sup>C(O)NR<sup>2</sup>R<sup>2</sup>, -NR<sup>2</sup>C(S)NR<sup>2</sup>R<sup>2</sup>, and -NR<sup>2</sup>C(=NR<sup>2</sup>)NR<sup>2</sup>R<sup>2</sup>;

R<sup>13</sup>, at each occurrence, independently is selected from the group consisting of:

a) hydrogen, b) carbonyl, c) formyl d) F, e) Cl, f) Br, g) I, h) CN, i) NO<sub>2</sub>, j) OR<sup>3</sup>, k) -S(O)<sub>r</sub>R<sup>5</sup>, l) -S(O)<sub>r</sub>N=R<sup>3</sup>, m) -C(O)R<sup>2</sup>, n) -C(O)OR<sup>3</sup>, o) -OC(O)R<sup>2</sup>, p) -C(O)NR<sup>2</sup>R<sup>2</sup>, q) -OC(O)NR<sup>2</sup>R<sup>2</sup>, r) -C(=NR<sup>12</sup>)R<sup>2</sup>, s) -C(R<sup>2</sup>)(R<sup>2</sup>)OR<sup>3</sup>, t) -C(R<sup>2</sup>)(R<sup>2</sup>)OC(O)R<sup>2</sup>, u) -C(R<sup>2</sup>)(OR<sup>3</sup>)(CH<sub>2</sub>)<sub>r</sub>NR<sup>2</sup>R<sup>2</sup>, v) -NR<sup>2</sup>R<sup>2</sup>, w) -NR<sup>2</sup>OR<sup>3</sup>,

x)  $-N(R^2)C(O)R^2$ , y)  $-N(R^2)C(O)OR^3$ , z)  $-N(R^2)C(O)NR^2R^2$ , aa)  $-N(R^2)S(O)_rR^5$ ,  
bb)  $-C(OR^6)(OR^6)R^2$ , cc)  $-C(R^2)(R^3)NR^2R^2$ , dd)  $-C(R^2)(R^3)NR^2R^{12}$ , ee)  $=NR^{12}$ ,  
ff)  $-C(S)NR^2R^2$ , gg)  $-N(R^2)C(S)R^2$ , hh)  $-OC(S)NR^2R^2$ , ii)  $-N(R^2)C(S)OR^3$ ,  
jj)  $-N(R^2)C(S)NR^2R^2$ , kk)  $-SC(O)R^2$ , ll)  $C_{1-8}$  alkyl, mm)  $C_{2-8}$  alkenyl,  
nn)  $C_{2-8}$  alkynyl, oo)  $C_{1-8}$  alkoxy, pp)  $C_{1-8}$  alkylthio, qq)  $C_{1-8}$  acyl, rr) saturated,  
unsaturated, or aromatic  $C_{5-10}$  carbocycle, ss) saturated, unsaturated, or aromatic  
5-10 membered heterocycle containing one or more heteroatoms selected from the  
group consisting of nitrogen, oxygen, and sulfur, tt) saturated, unsaturated, or  
aromatic 10-membered bicyclic ring system optionally containing one or more  
heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,  
uu) saturated, unsaturated, or aromatic 13-membered tricyclic ring system  
optionally containing one or more heteroatoms selected from the group consisting  
of nitrogen, oxygen, and sulfur,

wherein any of ll) – uu) optionally is substituted with one or more moieties  
selected from the group consisting of:

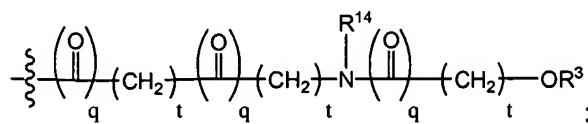
carbonyl; formyl; F; Cl; Br; I; CN;  $NO_2$ ;  $OR^3$ ;  $-S(O)_rR^5$ ;  
 $-S(O)_rN=R^2$ ,  $-C(O)R^2$ ;  $-C(O)OR^3$ ;  $-OC(O)R^2$ ;  $-C(O)NR^2R^2$ ;  
 $-OC(O)NR^2R^2$ ;  $-C(=NR^{12})R^2$ ;  $-C(R^2)(R^2)OR^3$ ;  
 $-C(R^2)(R^2)OC(O)R^2$ ;  $-C(R^2)(OR^3)(CH_2)NR^2R^2$ ;  $-NR^2R^2$ ;  
 $-NR^2OR^3$ ;  $-NR^2C(O)R^2$ ;  $-NR^2C(O)OR^3$ ;  $-NR^2C(O)NR^2R^2$ ;  
 $-NR^2S(O)_rR^5$ ;  $-C(OR^6)(OR^6)R^2$ ;  $-C(R^2)(R^3)NR^2R^2$ ;  
 $-C(R^2)(R^3)NR^2R^{12}$ ;  $=NR^{12}$ ;  $-C(S)NR^2R^2$ ;  $-NR^2C(S)R^2$ ;  
 $-OC(S)NR^2R^2$ ;  $-NR^2C(S)OR^3$ ;  $-NR^2C(S)NR^2R^2$ ;  $-SC(O)R^2$ ;  
 $C_{1-8}$  alkyl,  $C_{2-8}$  alkenyl;  $C_{2-8}$  alkynyl;  $C_{1-8}$  alkoxy;  $C_{1-8}$  alkylthio;  
 $C_{1-8}$  acyl; saturated, unsaturated, or aromatic  $C_{3-10}$  carbocycle  
optionally substituted with one or more  $R^7$  groups; and saturated,  
unsaturated, or aromatic 3-10 membered heterocycle containing  
one or more heteroatoms selected from the group consisting of

nitrogen, oxygen, and sulfur, and substituted with one or more R<sup>7</sup> groups;

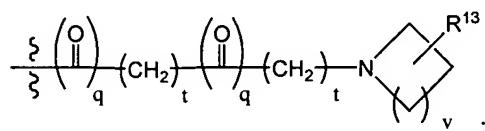
G is selected from the group consisting of:

a) C<sub>1-4</sub> alkyl, b) C<sub>5-8</sub> alkyl, c) C<sub>2-8</sub> alkenyl, d) C<sub>2-8</sub> alkynyl, e) C<sub>1-8</sub> alkoxy, f) C<sub>1-8</sub> alkylthio, g) C<sub>1-8</sub> acyl, h) saturated, unsaturated, or aromatic C<sub>5-10</sub> carbocycle, i) saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur,

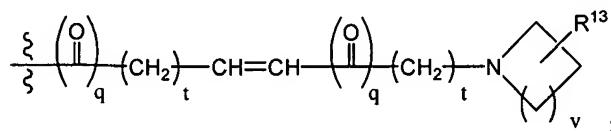
j)



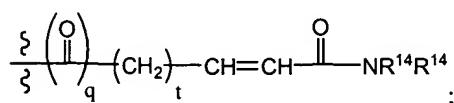
k)



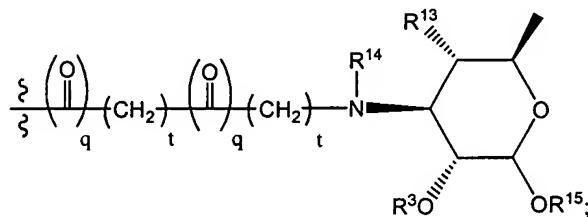
l)



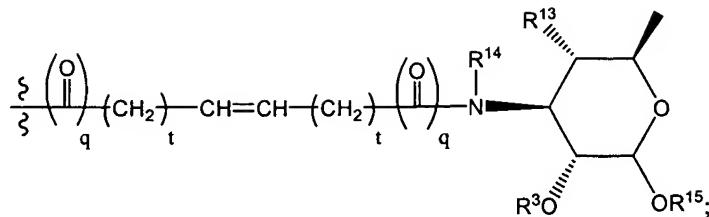
m)



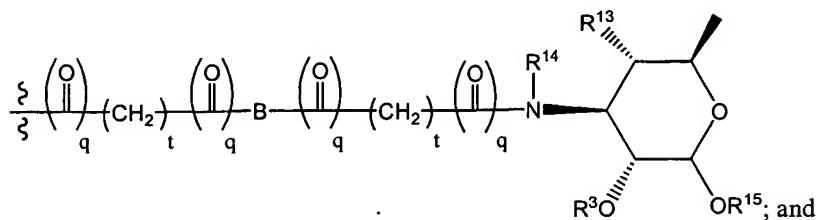
n)



o)



p)



q)  $-(CH_2)_t-NR^2-(CH_2)_t-C(R^3)(R^3)OR^3;$

wherein

- i) a) is substituted with, and
- ii) any of b) – i) optionally is substituted with one or more moieties selected from the group consisting of:

carbonyl; formyl; F; Cl; Br; I; CN; NO<sub>2</sub>; OR<sup>3</sup>; -S(O)<sub>r</sub>R<sup>5</sup>;  
 -S(O)<sub>r</sub>N=R<sup>2</sup>; -C(O)R<sup>2</sup>; -C(O)OR<sup>3</sup>; -OC(O)R<sup>2</sup>; -C(O)NR<sup>2</sup>R<sup>2</sup>;  
 -OC(O)NR<sup>2</sup>R<sup>2</sup>; -C(=NR<sup>12</sup>)R<sup>2</sup>; -C(R<sup>2</sup>)(R<sup>2</sup>)OR<sup>3</sup>;  
 -C(R<sup>2</sup>)(R<sup>2</sup>)OC(O)R<sup>2</sup>; -C(R<sup>2</sup>)(OR<sup>3</sup>)(CH<sub>2</sub>)<sub>r</sub>NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>R<sup>2</sup>;  
 -NR<sup>2</sup>OR<sup>3</sup>; -NR<sup>2</sup>C(O)R<sup>2</sup>; -NR<sup>2</sup>C(O)OR<sup>3</sup>; -NR<sup>2</sup>C(O)NR<sup>2</sup>R<sup>2</sup>;  
 -NR<sup>2</sup>S(O)<sub>r</sub>R<sup>5</sup>; -C(OR<sup>6</sup>)(OR<sup>6</sup>)R<sup>2</sup>; -C(R<sup>2</sup>)(R<sup>3</sup>)NR<sup>2</sup>R<sup>2</sup>;  
 -C(R<sup>2</sup>)(R<sup>3</sup>)NR<sup>2</sup>R<sup>12</sup>; =NR<sup>12</sup>; -C(S)NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>C(S)R<sup>2</sup>;  
 -OC(S)NR<sup>2</sup>R<sup>2</sup>; -NR<sup>2</sup>C(S)OR<sup>3</sup>; -NR<sup>2</sup>C(S)NR<sup>2</sup>R<sup>2</sup>; -SC(O)R<sup>2</sup>;  
 C<sub>2-5</sub> alkenyl; C<sub>2-5</sub> alkynyl; C<sub>1-8</sub> alkoxy; C<sub>1-8</sub> alkylthio; C<sub>1-8</sub> acyl;  
 saturated, unsaturated, or aromatic C<sub>5-10</sub> carbocycle, optionally substituted with one or more R<sup>13</sup> groups; and saturated, unsaturated, or aromatic 5-10 membered heterocycle containing one or more heteroatoms selected from the group consisting of

nitrogen, oxygen, and sulfur, and optionally substituted with one or more  $R^{13}$  groups;

$t$ , at each occurrence, independently is 0, 1, 2, or 3;

$v$  is 0, 1, 2, 3, 4, 5, or 6;

$R^{14}$  is selected from the group consisting of:

- a) hydrogen, b)  $C_{1-6}$ -alkyl, c)  $C_{2-6}$  alkenyl, d)  $C_{2-6}$  alkynyl, e)  $-C(O)-R^3$ ,
- f)  $-C(O)-C_{1-6}$  alkyl- $R^3$ , g)  $-C(O)-C_{2-6}$  alkenyl- $R^3$ , h)  $-C(O)-C_{2-6}$  alkynyl- $R^3$ ,
- i)  $-C_{1-6}$  alkyl- $J-R^3$ , j)  $-C_{2-6}$  alkenyl- $J-R^3$ ; and k)  $-C_{2-6}$  alkynyl- $J-R^3$ ;

wherein

- (i) any of b) – d) optionally is substituted with one or more substituents selected from the group consisting of:

F, Cl, Br, I, aryl, substituted aryl, heteroaryl, substituted heteroaryl,  $-OR^3$ ,  $-O-C_{1-6}$  alkyl- $R^2$ ,  $-O-C_{2-6}$  alkenyl- $R^2$ ,  $-O-C_{2-6}$  alkynyl- $R^2$ , and  $-NR^2R^2$ ; and

- (ii)  $J$  is selected from the group consisting of:

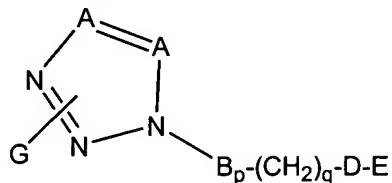
$-OC(O)-$ ,  $-OC(O)O-$ ,  $-OC(O)NR^2-$ ,  $-C(O)NR^2-$ ,  $-NR^2C(O)-$ ,  $-NR^2C(O)O-$ ,  $-NR^2C(O)NR^2-$ ,  $-NR^2C(NH)NR^2-$ , and  $S(O)_r$ ; and

$R^{15}$  is selected from the group consisting of:

hydrogen;  $C_{1-10}$  alkyl, optionally substituted with one or more  $R^{13}$  groups;

$C_{1-6}$  acyl, optionally substituted with one or more  $R^{13}$  groups; aryl; substituted aryl; heteroaryl; substituted heteroaryl; arylalkyl; substituted arylalkyl; and a macrolide.

2. (Original) The compound according to claim 1, having the formula:

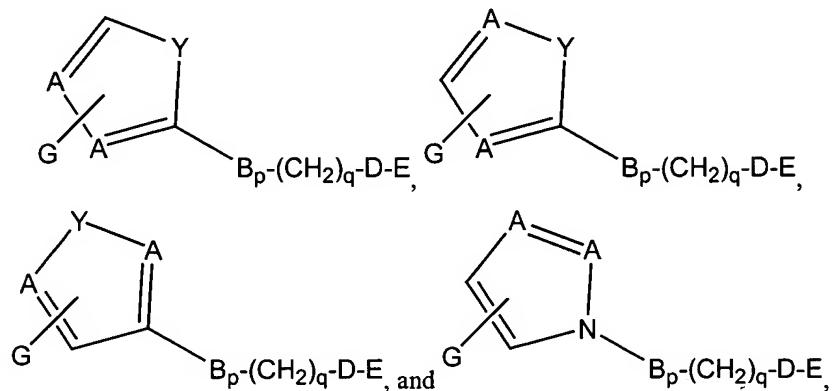


wherein

A, at each occurrence, independently is carbon or nitrogen, provided at least one A is carbon, and

p, q, B, D, E, and G are as defined in claim 1.

3. (Original) The compound according to claim 1, having the formula selected from the group consisting of:



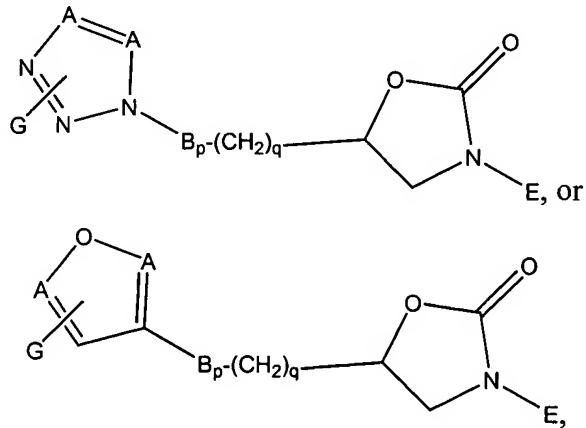
wherein

Y is oxygen or sulfur,

A, at each occurrence, independently is carbon or nitrogen, and

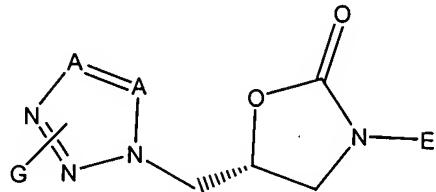
p, q, B, D, E, and G are as defined in claim 1.

4. (Original) The compound according to claim 1, having the formula:



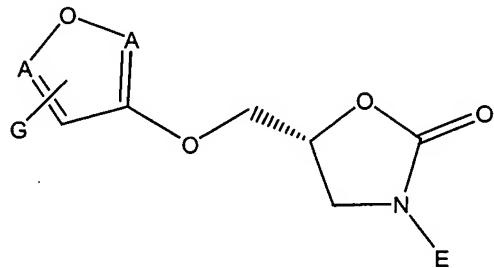
wherein p, q, A, B, E, and G are as defined in claim 1.

5. (Original) The compound according to claim 4, having the formula:



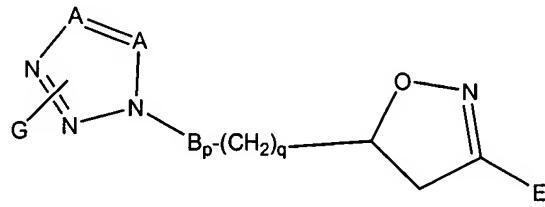
wherein A, E, and G are as defined in claim 1.

6. (Original) The compound according to claim 4, having the formula:

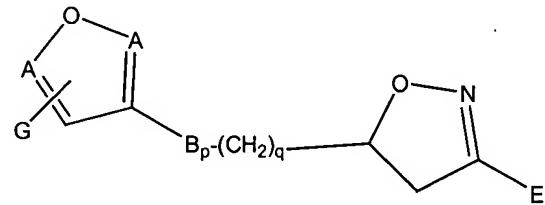


wherein A, E, and G are as defined in claim 1.

7. (Original) The compound according to claim 1, having the formula:

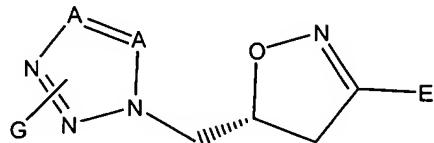


or



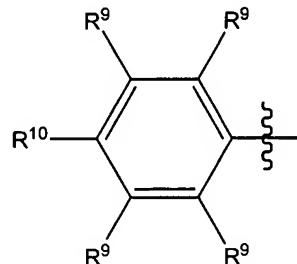
wherein p, q, A, E, and G are as defined in claim 1.

8. (Original) The compound according to claim 7, having the formula:



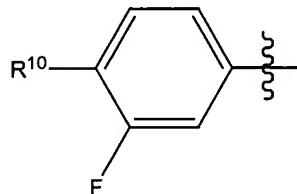
wherein A, E, and G are as defined in claim 1.

9. (Original) The compound according to claim 1, wherein E has the formula:



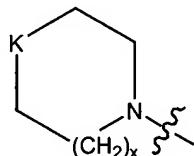
wherein R<sup>9</sup> and R<sup>10</sup>, at each occurrence, are as defined in claim 1.

10. (Original) The compound according to claim 1, wherein E has the formula:



wherein R<sup>10</sup> is as defined in claim 1.

11. (Original) The compound according to claim 9, wherein R<sup>10</sup> has the formula:

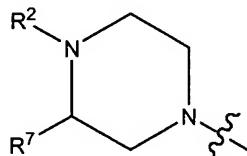


wherein

K is selected from the group consisting of O, NR<sup>2</sup>, and S(O)<sub>r</sub>, and

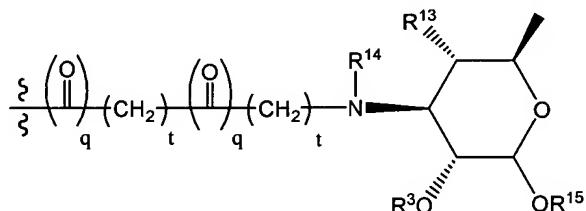
x is 0, 1, 2, or 3.

12. (Original) The compound according to claim 11, wherein K is oxygen.
13. (Original) The compound according to claim 11, wherein t is 1.
14. (Original) The compound according to claim 9, wherein  $R^{10}$  is  $-C(O)CH_3$ .
15. (Original) The compound according to claim 9, wherein  $R^{10}$  has the formula:



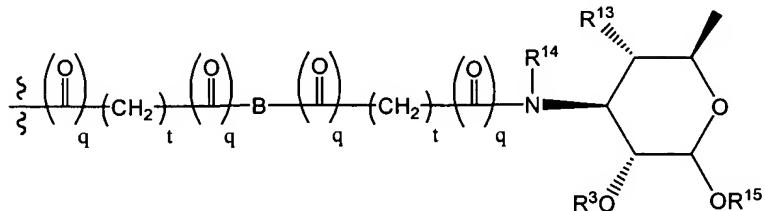
wherein  $R^2$  and  $R^7$  are as defined in claim 1.

16. (Original) The compound according to claim 15, wherein R<sup>2</sup> is -C(O)-CH<sub>2</sub>-OH.
17. (Original) The compound according to claim 15, wherein R<sup>7</sup> is hydrogen.
18. (Original) The compound according to claim 1, wherein G has the formula:



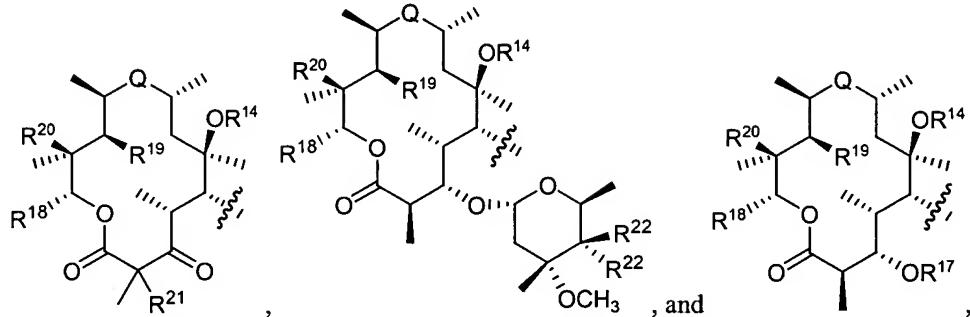
and  $R^{15}$  is a macrolide.

19. (Original) The compound according to claim 1, wherein G has the formula:



and  $R^{15}$  is a macrolide.

20. (Original) The compound according to claim 1, wherein R<sup>15</sup> is selected from the group consisting of:



and pharmaceutically acceptable salts, esters and prodrugs thereof, wherein

R<sup>17</sup> is selected from the group consisting of:

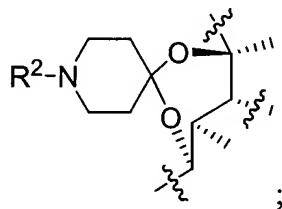
hydrogen, hydroxy protecting group, R<sup>3</sup>, and -V-W-R<sup>13</sup>,

wherein

V is -C(O), -C(O)O-, -C(O)NR<sup>2</sup>-, or absent, and

W is C<sub>1-6</sub> alkyl, or absent;

alternatively R<sup>17</sup> and R<sup>14</sup>, taken together with the atoms to which they are bonded, form:



Q is selected from the group consisting of:

-NR<sup>2</sup>CH<sub>2</sub>-, -CH<sub>2</sub>-NR<sup>2</sup>-, -C(O)-, -C(=NR<sup>2</sup>)-, -C(=NOR<sup>3</sup>)-, -C(=N-NR<sup>2</sup>R<sup>2</sup>)-,  
-CH(OR<sup>3</sup>)-, and -CH(NR<sup>2</sup>R<sup>2</sup>)-;

R<sup>18</sup> is selected from the group consisting of:

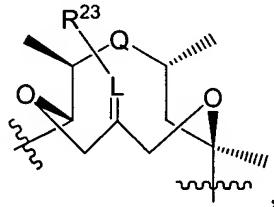
i) C<sub>1-6</sub> alkyl, ii) C<sub>2-6</sub> alkenyl, and iii) C<sub>2-6</sub> alkynyl;

wherein any of i) – iii) optionally is substituted with one or more moieties selected from the group consisting of -OR<sup>3</sup>, aryl, substituted aryl, heteroaryl, and substituted heteroaryl;

R<sup>19</sup> is selected from the group consisting of:

a)  $-\text{OR}^{17}$ , b)  $\text{C}_{1-6}$  alkyl, c)  $\text{C}_{2-6}$  alkenyl, d)  $\text{C}_{2-6}$  alkynyl, e)  $-\text{NR}^2\text{R}^2$ , f)  $-\text{C}(\text{O})\text{R}^3$ ,  
g)  $-\text{C}(\text{O})-\text{C}_{1-6}$  alkyl- $\text{R}^{13}$ , h)  $-\text{C}(\text{O})-\text{C}_{2-6}$  alkenyl- $\text{R}^{13}$ , and i)  $-\text{C}(\text{O})-\text{C}_{2-6}$  alkynyl- $\text{R}^{13}$ ,  
wherein any of b) - d) optionally is substituted with one or more  $\text{R}^{13}$   
groups;

alternatively,  $\text{R}^{14}$  and  $\text{R}^{19}$ , taken together with the atoms to which they are bonded, form:



wherein

$\text{L}$  is CH or N, and

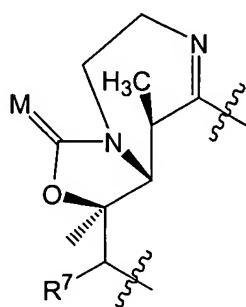
$\text{R}^{23}$  is  $-\text{OR}^3$ , or  $\text{R}^3$ ;

$\text{R}^{20}$  is  $-\text{OR}^{17}$ ;

alternatively,  $\text{R}^{19}$  and  $\text{R}^{20}$ , taken together with the atoms to which they are bonded, form a 5-membered ring by attachment to each other through a linker selected from the group consisting of:

$-\text{OC}(\text{R}^2)(\text{R}^2)\text{O}-$ ,  $-\text{OC}(\text{O})\text{O}-$ ,  $-\text{OC}(\text{O})\text{NR}^2-$ ,  $-\text{NR}^2\text{C}(\text{O})\text{O}-$ ,  $-\text{OC}(\text{O})\text{NOR}^3-$ ,  
 $-\text{N}(\text{OR}^3)\text{C}(\text{O})\text{O}-$ ,  $-\text{OC}(\text{O})\text{N}-\text{NR}^2\text{R}^2-$ ,  $-\text{N}(\text{NR}^2\text{R}^2)\text{C}(\text{O})\text{O}-$ ,  $-\text{OC}(\text{O})\text{CHR}^2-$ ,  $-\text{CHR}^2\text{C}(\text{O})\text{O}-$ ,  
 $-\text{OC}(\text{S})\text{O}-$ ,  $-\text{OC}(\text{S})\text{NR}^2-$ ,  $-\text{NR}^2\text{C}(\text{S})\text{O}-$ ,  $-\text{OC}(\text{S})\text{NOR}^3-$ ,  $-\text{N}(\text{OR}^3)\text{C}(\text{S})\text{O}-$ ,  
 $-\text{OC}(\text{S})\text{N}-\text{NR}^2\text{R}^2-$ ,  $-\text{N}(\text{NR}^2\text{R}^2)\text{C}(\text{S})\text{O}-$ ,  $-\text{OC}(\text{S})\text{CHR}^2-$ , and  $-\text{CHR}^2\text{C}(\text{S})\text{O}-$ ;

alternatively,  $\text{Q}$ ,  $\text{R}^{19}$ , and  $\text{R}^{20}$ , taken together with the atoms to which they are bonded, form:



wherein

M is O or NR<sup>2</sup>;

R<sup>21</sup> is selected from the group consisting of:

hydrogen, F, Cl, Br, and C<sub>1-6</sub> alkyl;

R<sup>22</sup>, at each occurrence, independently is selected from the group consisting of:

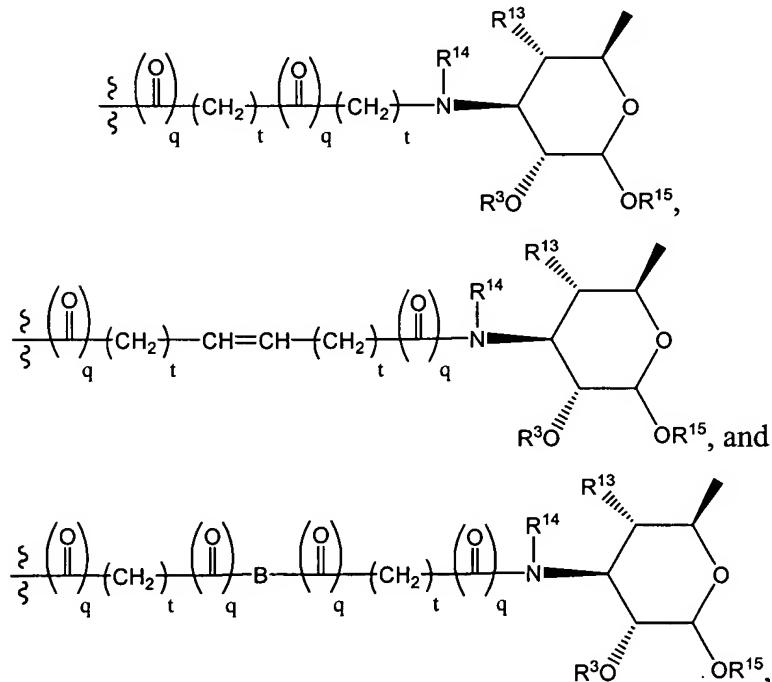
hydrogen, -OR<sup>3</sup>, -O-hydroxy protecting group, -O-C<sub>1-6</sub> alkyl-J-R<sup>13</sup>,

-O-C<sub>2-6</sub> alkenyl-J-R<sup>13</sup>, -O-C<sub>1-6</sub> alkynyl-J-R<sup>13</sup>, and -NR<sup>2</sup>R<sup>2</sup>;

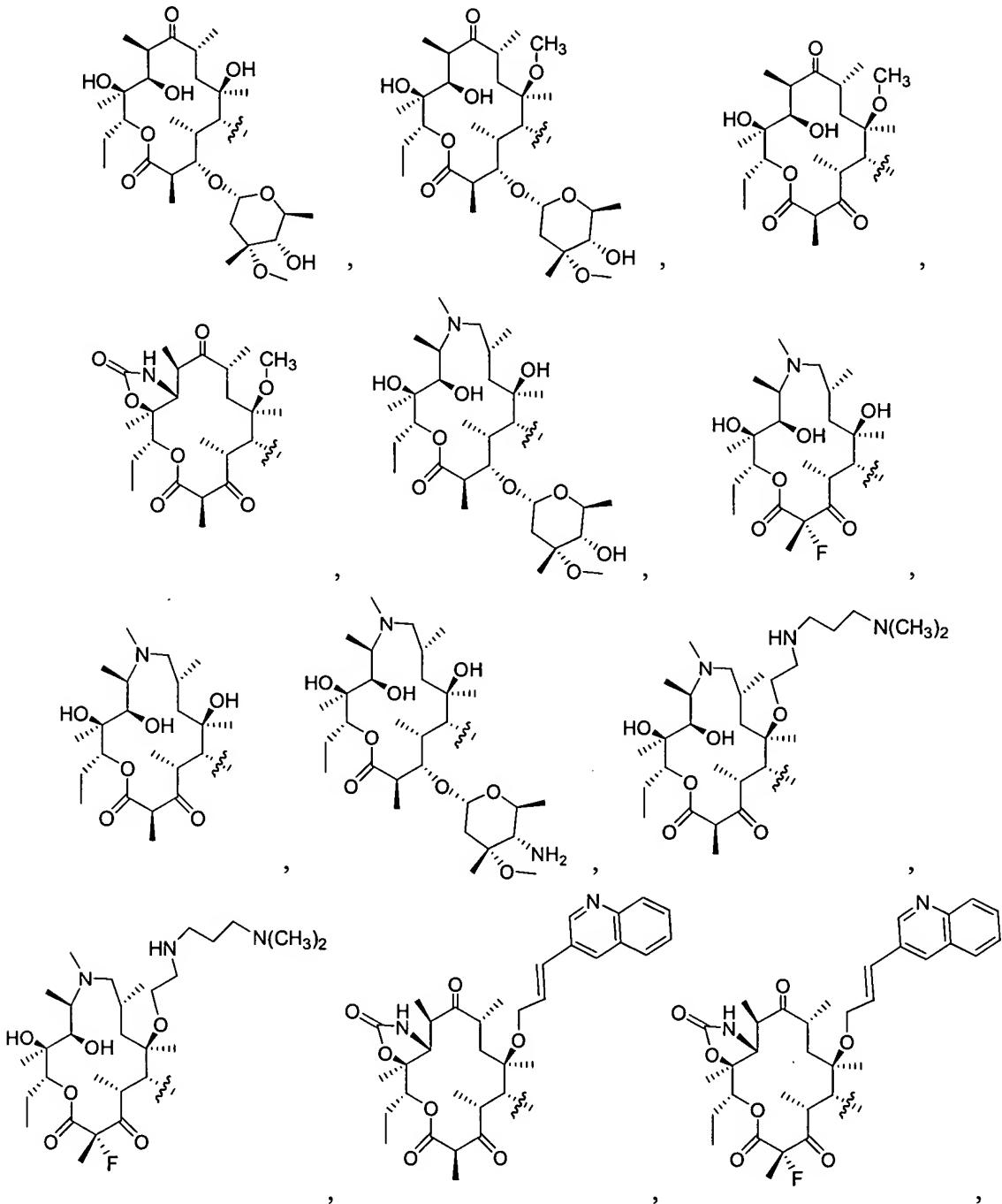
alternatively, two R<sup>22</sup> groups taken together are =O, =N-OR<sup>3</sup>, or =N-NR<sup>2</sup>R<sup>2</sup>; and

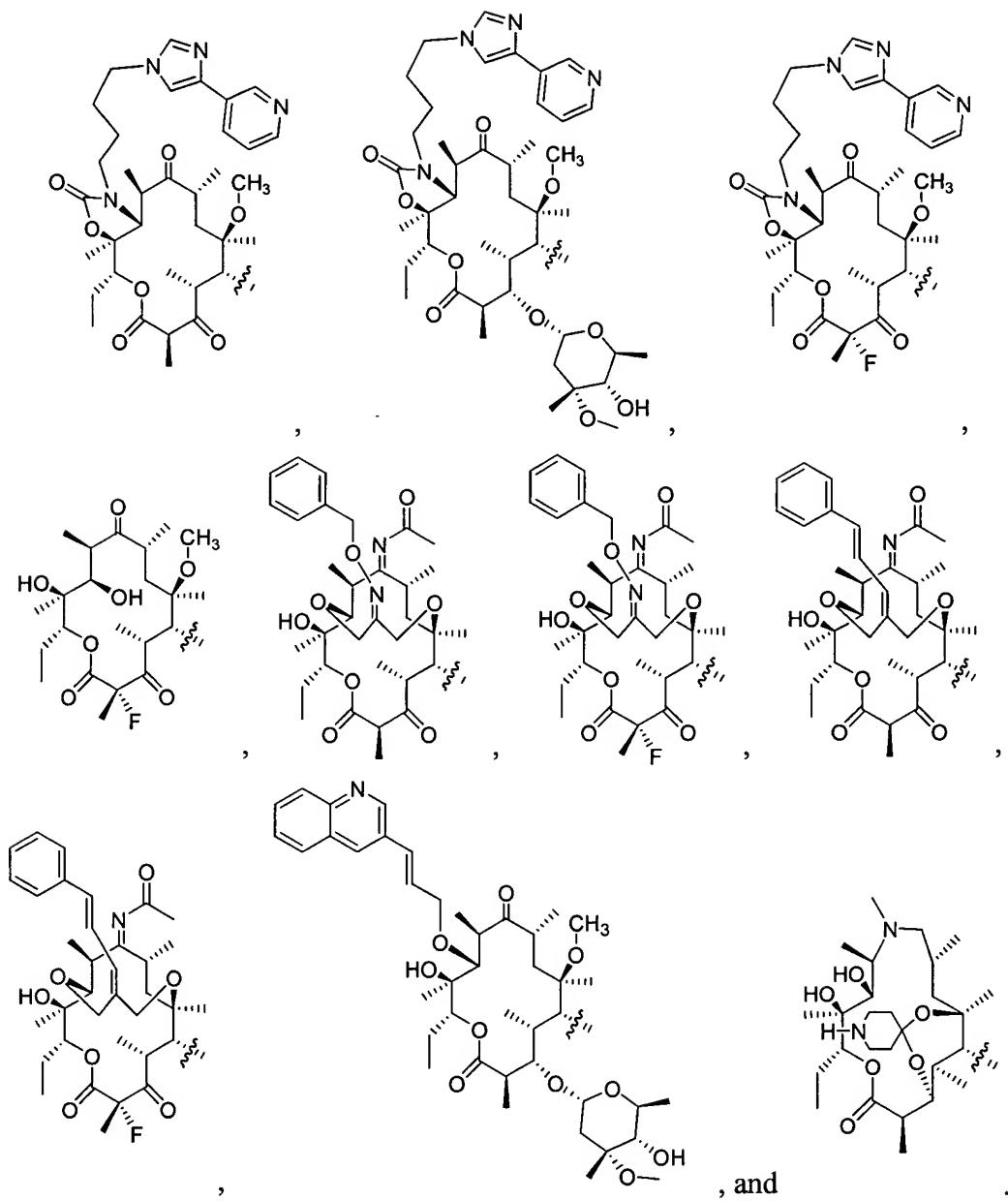
R<sup>2</sup>, R<sup>3</sup>, R<sup>13</sup>, R<sup>14</sup>, and J are as described in claim 1.

21. (Original) The compound according to claim 1, wherein G has the formula selected from the group consisting of:

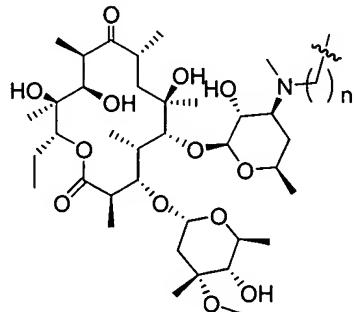


and R<sup>15</sup> has the formula selected from the group consisting of:



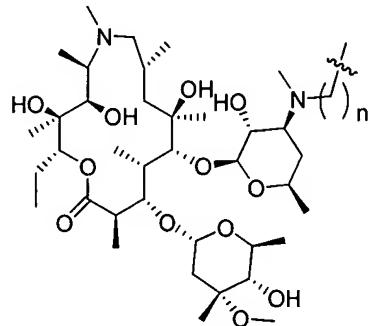


22. (Original) The compound according to claim 1, wherein G has the formula:



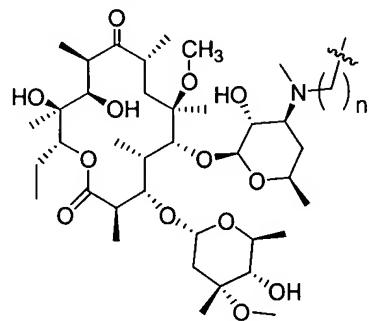
wherein n = 1, 2, 3, or 4.

23. (Original) The compound according to claim 1, wherein G has the formula:



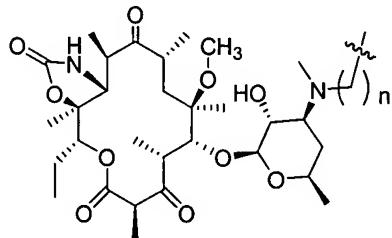
wherein n = 1, 2, 3, or 4.

24. (Original) The compound according to claim 1, wherein G has the formula:



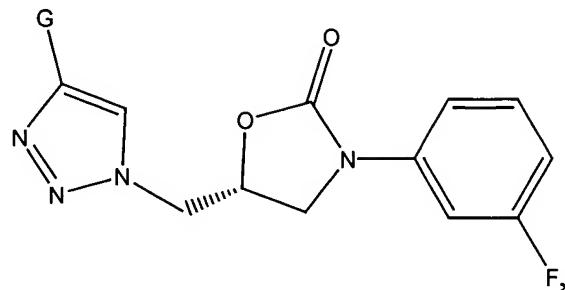
wherein n = 1, 2, 3, or 4.

25. (Original) The compound according to claim 1, wherein G has the formula:



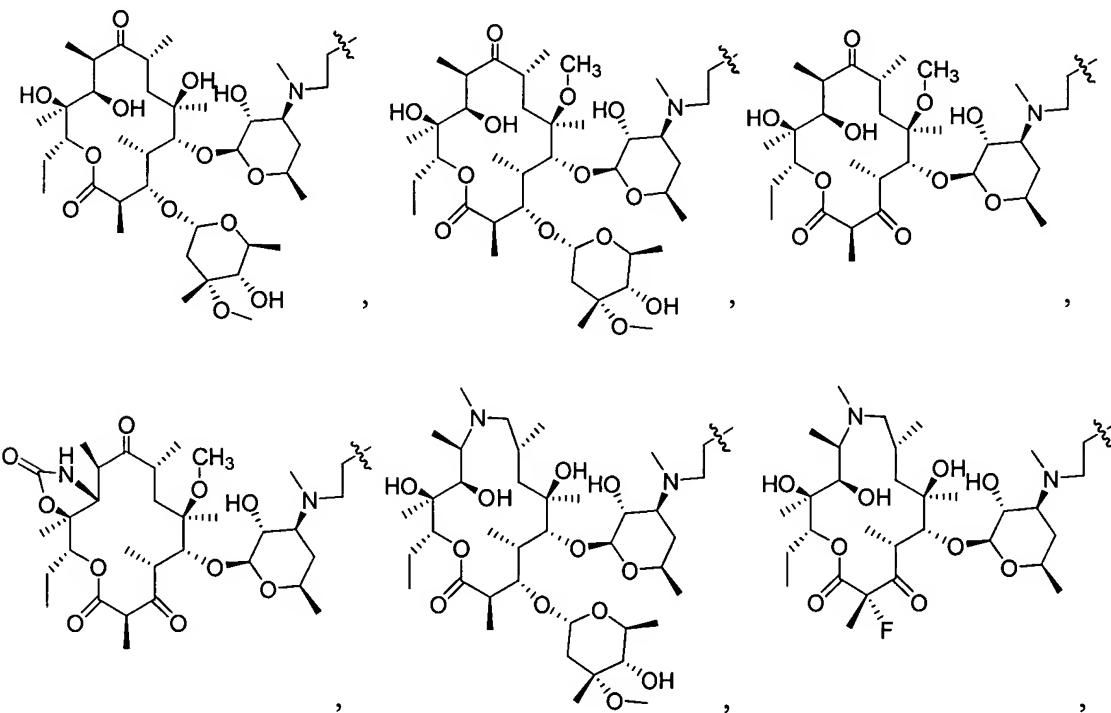
wherein n = 1, 2, 3, or 4.

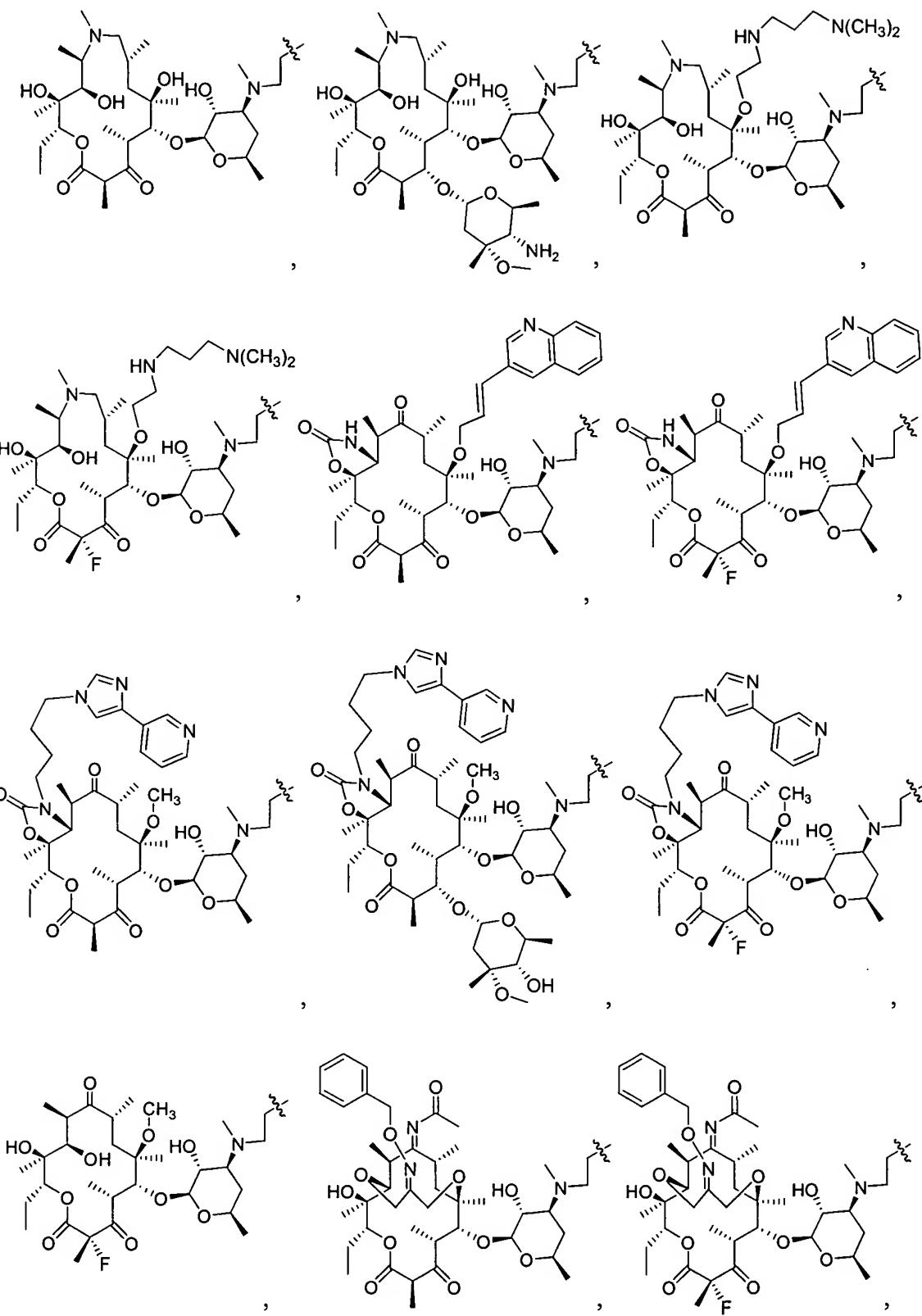
26. (Original) The compound according to claim 1, having the formula:

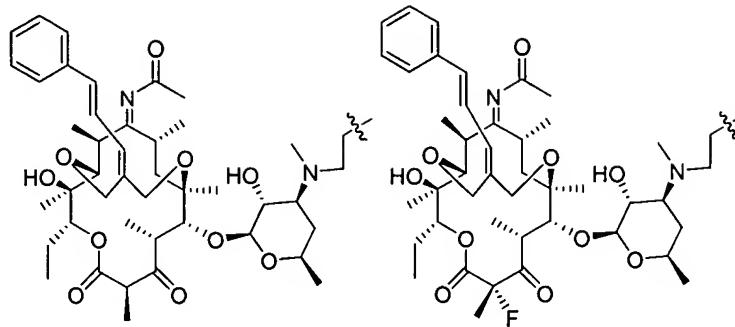


wherein G is as described in claim 1.

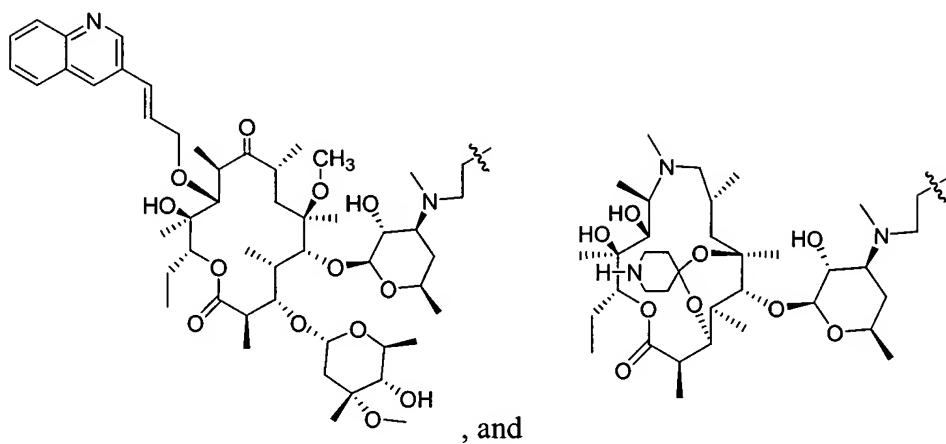
27. (Original) The compound according to claim 26, wherein G has the formula selected from the group consisting of:







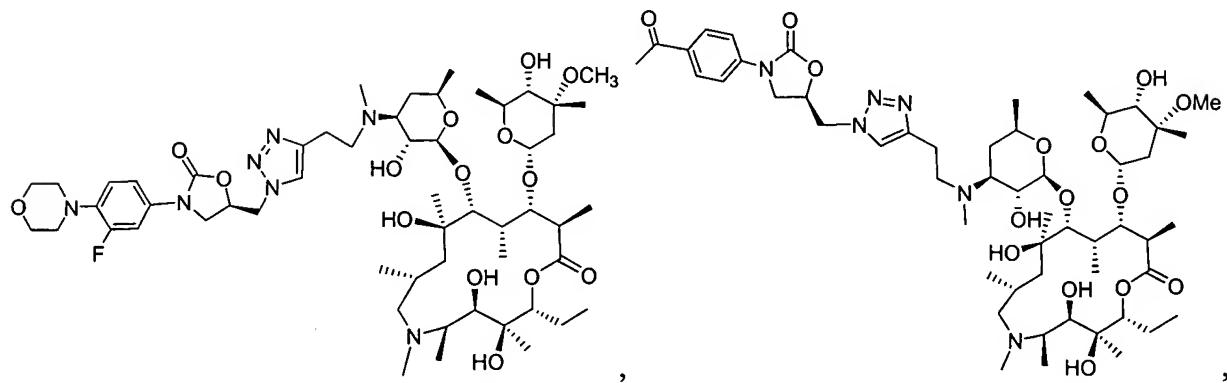
,



, and

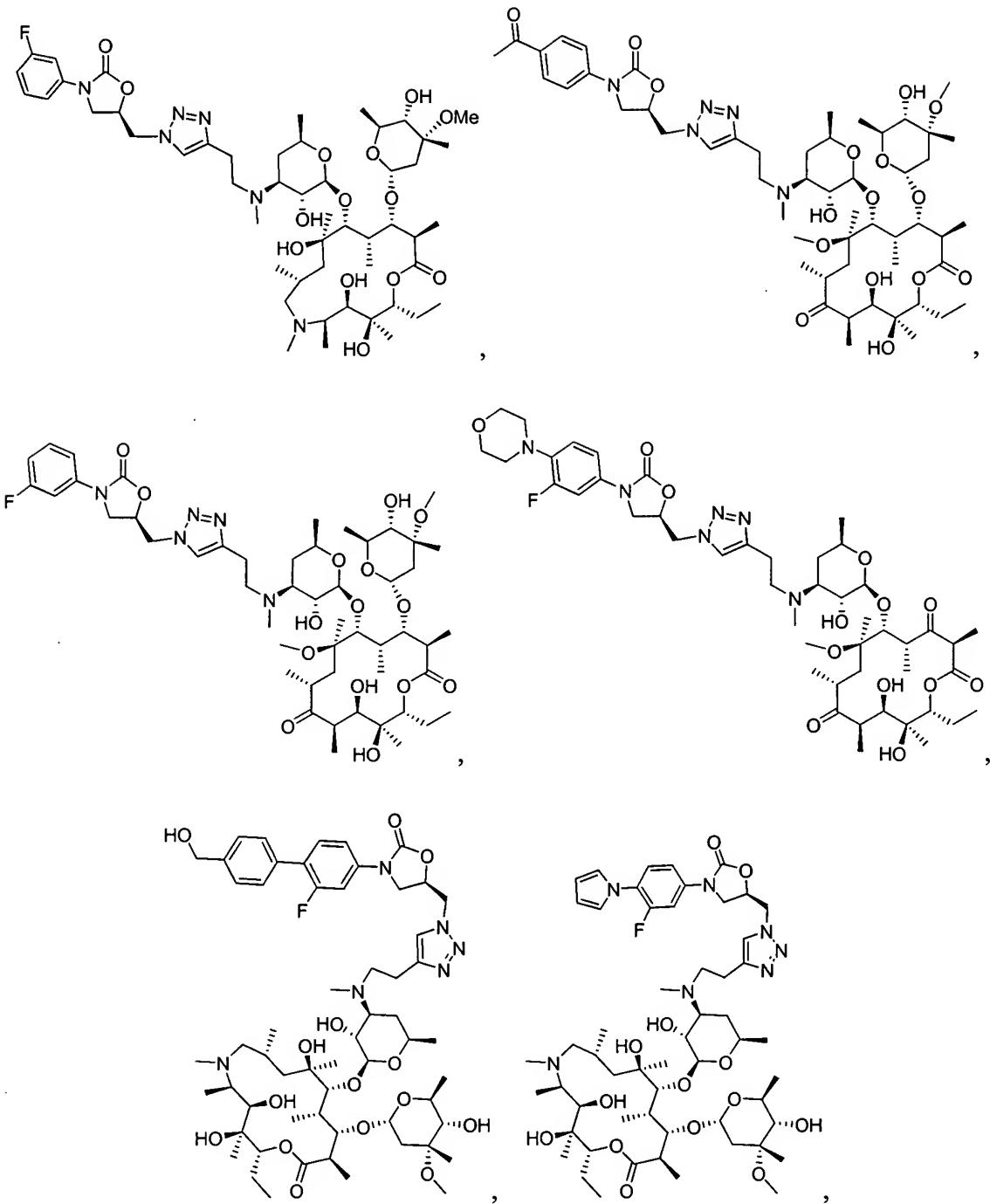
,

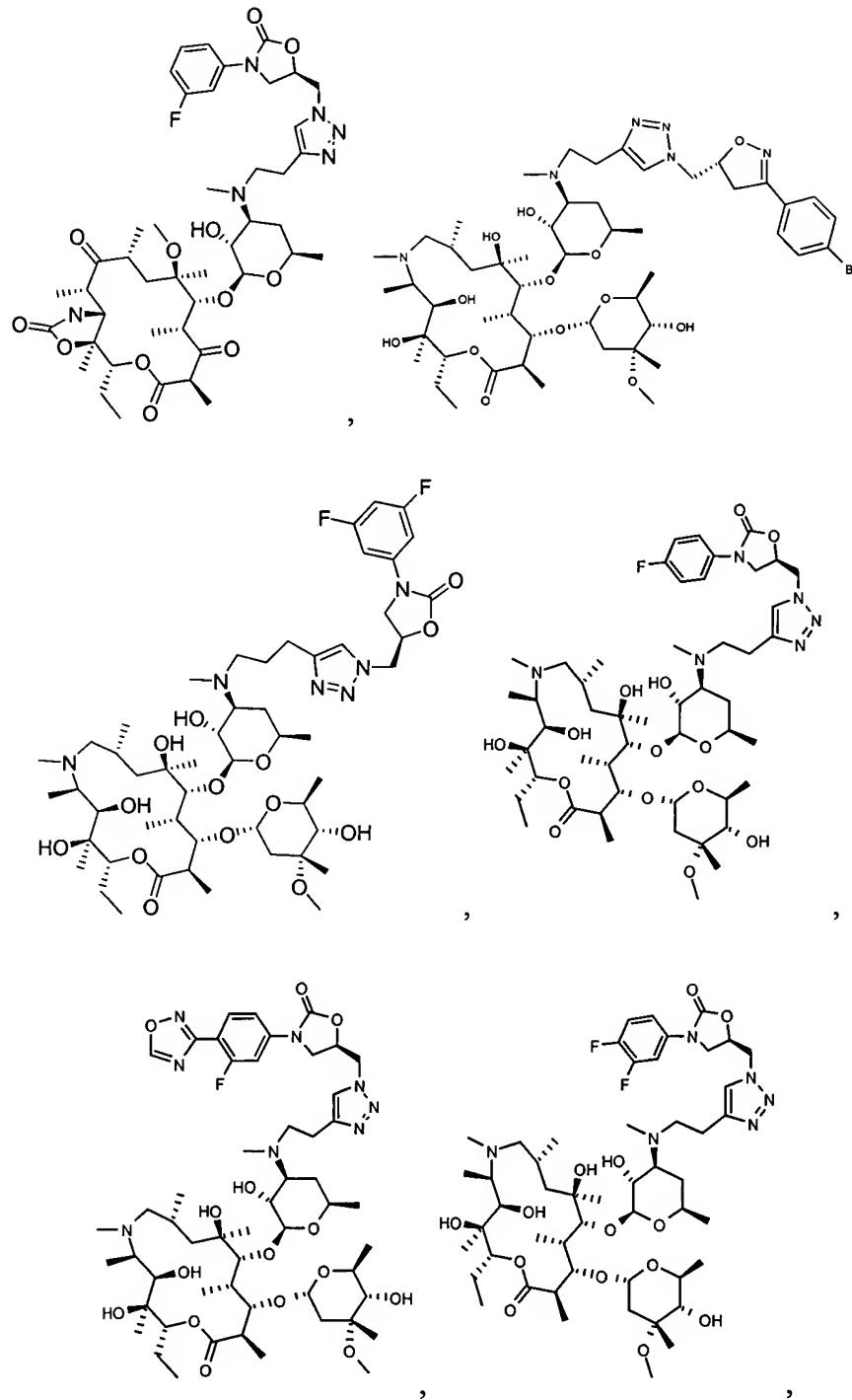
28. (Original) A compound having the formula selected from the group consisting of:

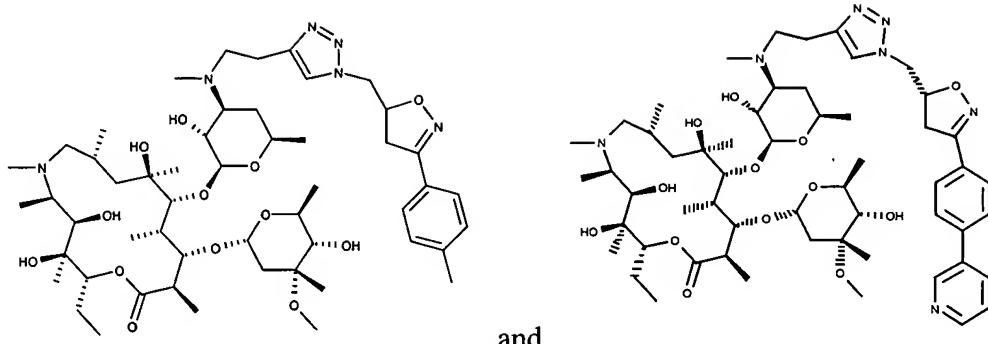


,

,







or a pharmaceutically acceptable salt, ester, or prodrug thereof.

29. (Original) A compound having the structure corresponding to any of the structures listed in Table 1, or a pharmaceutically acceptable salt, ester, or prodrug thereof.

30. (Original) A compound having the structure corresponding to any of the structures listed in Table 2, or a pharmaceutically acceptable salt, ester, or prodrug thereof.

31. (Currently amended) A pharmaceutical composition comprising a-one or more compounds according to any one of claim[[s]] 1[-30] and a pharmaceutically acceptable carrier.

32. (Currently amended) A method of treating a microbial infection in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[-30].

33. (Currently amended) A method of treating a fungal infection in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[-30].

34. (Currently amended) A method of treating a parasitic disease in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[-30].

35. (Currently amended) A method of treating a proliferative disease in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[[-30]].
36. (Currently amended) A method of treating a viral infection in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[[-30]].
37. (Currently amended) A method of treating an inflammatory disease in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[[-30]].
38. (Currently amended) A method of treating a gastrointestinal motility disorder in a mammal comprising administering to the mammal an effective amount of a-one or more compounds according to any one of claim[[s]] 1[[-30]].
39. (Original) The method according to any one of claims 32-38 wherein the compound is administered orally, parentally, or topically.
40. (Currently amended) A method of synthesizing a compound according to any of claim[[s]] 1[[-30]].
41. (Currently amended) A medical device containing a-one or more compounds according to any one of claim[[s]] 1[[-30]].
42. (Original) The medical device according to claim 41, wherein the device is a stent.